

WETLANDS BIOLOGICAL ASSESSMENTS: THE 1-2-3 APPROACH

Facilitators

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Biographical Sketches

Chris Faulkner is an aquatic biologist with the US Environmental Protection Agency. He has worked on ambient water quality monitoring and assessment for 15 years.

John J. Mack is a wetland ecologist and botanist with the Ohio Environmental Protection Agency. He received a B.S. in Interdisciplinary Studies from Miami University in Oxford, Ohio, an M.S. in Environmental Science from Indiana University, Bloomington, Indiana, a Juris Doctor from Cleveland State University, Cleveland, Ohio, and an M.S. in Evolution, Ecology, and Organismal Biology from The Ohio State University, Columbus, Ohio. His work at Ohio EPA includes developing and applying biological indicators to assess wetland condition including the development of a Vegetation Index of Biotic Integrity for Ohio wetlands. He also has done research on the history of the prairie peninsula in Ohio and the floristics and ecology of Ohio prairie and savannah.

Workshop Description

Wetlands play a vital role in water quality management programs. As is true with all waterbodies, the biological community of a wetland reflects the cumulative response to a host of chemical, physical, and biological stressors. The most meaningful way to measure biological condition is to directly examine one or more biological assemblages such as macroinvertebrates or vascular plants. This biological assessment data will then be used to evaluate ambient water quality conditions as well as determine success of wetland mitigation and restoration efforts. EPA advocates Wetland assessment at three different tiers. This course will introduce the 1 - 2 - 3 assessment approach as well as focus on the selection of assessment metrics for integration into a final index. This course will introduce biological assessment and criteria methods for wetlands and their many applications to State and Tribal wetland programs. Course material will be taken from EPA's Methods for Evaluating Wetland Condition as well as case studies and examples from states. Recommended for anyone interested in conducting biological assessments and deriving biocriteria for wetlands.